

MARS MANUFACTURING COMPANY

MODELS: Mars MI-80, 2 PCLM (Approved 5/1/46)

T.C. NUMBER: T.C. 771

Engine	Lycoming GO-145-C2
Fuel	73 minimum octane aviation gasoline
Engine limits	For all operations, 3200 rpm (75 hp)
Airspeed limits	Level flight or climb - 110 mph True Ind. Glide or dive - 144 mph True Ind. Flaps extended - 80 mph True Ind.
Propeller limits	Static rpm (engine) at maximum permissible throttle setting: Not more or less than 2775 rpm; Diameter: Not more than 77 in., not less than 75 in.
C.G. range	(+14.0) to (+18.3)
Datum	Leading edge of wing
Leveling means	Longeron between door and instrument panel
Maximum weight	1350 lbs.
No. seats	2 (+17)
Maximum baggage	40 lbs. (+35)
Fuel capacity	20 gallons (two wing tanks, 10 gallons each) (+27) (See NOTE 4)
Oil capacity	5 quarts (-42)
Control surface movements	Wing flaps Elevator tab Up 4 degrees Down 46 degrees Elevator Up 17 degrees Down 26 degrees Aileron Up 18 degrees Down 9 degrees Rudder (None) Down 17 degrees Stabilizer (Fixed)
Serial Numbers eligible	101 and up per NOTE A
Required equipment	Items 1, 201 and 202

Specifications Pertinent to All Models:

Certification basis	Type Certificate No. 771 (CAR 4a)
Production basis	None (See NOTE A)
Export eligibility	Eligible for export as follows subject to provisions of MOP 2-4: (a) Canada - Landplane - eligible. - Skiplane - not eligible. (b) All other countries except Great Britain, Australia and New Zealand.

Propeller and Propeller Accessories:

1. Propeller - Wood (fixed or adj. pitch)	13 lbs.	(-60)
-------------------------------------------	---------	-------

Landing Gear and Floats:

201. 6.00-6 rear wheels with brakes (Firestone 6C4WB) and two-ply tires	29 lbs.	(+33)
202. 6.00-6 nose wheel (Firestone 6C3) with two-ply tire	12 lbs.	(-43)
203. Parking brake	Neglect Weight	

Interior Equipment:

401. Dual control	7 lbs.	(-12)
-------------------	--------	-------

NOTE A. Prior to original certification, each aircraft must satisfactorily

pass:

- (a) An inspection for workmanship, materials and conformity before and covering, metal priming or final finish is applied. All woodwork may be varnished.
- (b) A final inspection of the completed aircraft.
- (c) A check of the flight characteristics.

NOTE 1. Weight and balance report including list of equipment in certificated weight empty and corresponding center of gravity location, and loading instructions when necessary, must be submitted for each aircraft with original inspector's report and each subsequent report covering changes in such equipment.

NOTE 2. The following placard shall be placed on instrument panel in full view of the pilot:
"This Aircraft Characteristically Incapable of Spinning."

NOTE 3. Ailerons may be rigged either neutral or one inch up at the trailing edge.

NOTE 4. Fuel tank selector valve must be placarded to use one tank at a time.